

RDI-8 8 CHANNEL DI BOX + LINE MIXER





Congratulations on your choice of DI box + line mixer — you have purchased one of the finest stereo DI box + line mixers on the market today. This unit was developed using the expertise of professional sound engineers and working musicians. You will find that your new NADY AUDIO RDI-8 has superior performance and greater flexibility than any other DI box + line mixers in its price range. Please read this manual carefully to get the most out of your new unit.

Thanks for selecting NADY AUDIO as your choice in DI box + line mixer.

FEATURES

An invaluable and supremely flexible multi-purpose tool for many professional stage and studio applications, the RDI-8 functions as both an active DI (direct injection) Box and a Line Mixer.

- Eight totally independent DI Box units in a 1U package for multiple signal corrections/conversions, with 1/4"TRS jacks for balanced or unbalanced inputs and XLR jacks for servo-balanced outputs for each channel
- Each DI box eliminates impedance mismatch problems and converts any sound source from guitar to speaker inputs into a clean, powerful hum-free, noise-free and interference-free balanced signal perfect for even extremely long cable runs
- Can also be used simultaneously as an 8-channel Line Mixer with both stereo Line and Master outputs. Ingenious, multi-purpose design enables useful parallel-operation applications such as setting an independent stereo mix for stage monitoring for an extended setup of keyboards, samplers and synth modules while supplying independent XLR balanced outputs to the stage box for the front of house engineer.
- Controls for the Line Mixer operation only include independent rotary volume and L/R pan controls per channel for the Stereo

Line output and an additional Master Volume control for the Master Stereo output

- Independent 20dB PAD and Ground Lift switches per channel control both the DI Box and Line Mixer outputs simultaneously
- Optimum hookup flexibility with independent parallel link outputs for each channel enables such useful applications as monitoring a specific input locally while sending an XLR balanced direct output to another source without affecting the line mixer signal
- Advanced circuit design and carefully selected components ensure extended linear frequency response and ultra low distortion for pure, transparent audio across the spectrum for both DI Box and Line Mixer operation
- High-quality, rugged construction for maximum long life and reliability
- Shielded internal dual regulated power supply with ~115V(60Hz)/~230V(50Hz) select switch and fused IEC power cord connector

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WARNING





An equilateral triangle enclosing a lightening flash/arrowhead symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure which may be of sufficient magnitude to constitute a risk of electric shock.

An equilateral triangle enclosing an exclamation point is intended to alert the user to the presence of important operating and service instructions in the literature enclosed with this unit.

IMPORTANT SAFETY INSTRUCTIONS

When using this electronic device, basic precautions should always be taken, including the following:

- 1. Read all instructions before using the product.
- 2. Do not use this product near water (e.g., near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, etc.).
- 3. This product should be used only with a cart or stand that will keep it level and stable and prevent wobbling.
- 4. This product, in combination with headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
- 5. The product should be positioned so that proper ventilation is maintained.
- 6. The product should be located away from heat sources such as radiators, heat vents, or other devices (including amplifiers) that produce heat.
- 7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product. Replace the fuse only with one of the specified type, size, and correct rating.
- 8. The power supply cord should: (1) be undamaged, (2) never share an outlet or extension cord with other devices so that the outlet's or extension cord's power rating is exceeded, and (3) never be left plugged into the outlet when not being used for a long period of time.
- 9. Care should be taken so that objects do not fall into, and liquids are not spilled through, the enclosure's openings.
- 10. The product should be serviced by qualified service personnel if:
 - A. The power supply cord or the plug has been damaged.
 - B. Objects have fallen into, or liquid has been spilled onto the product.
 - C. The product has been exposed to rain.
 - D. The product does not appear to operate normally or exhibits a marked change in performance.
 - E. The product has been dropped, or the enclosure damaged.
- 11. Do not attempt to service the product beyond what is described in the user maintenance instructions. All other servicing should be referred to qualified service personnel.

INSTALLATION

To ensure years of enjoyment from your NADY AUDIO RDI-8, please read and understand this manual thoroughly before using the unit.

INSPECTION

Your RDI-8 was carefully packed at the factory in packaging designed to protect the units in shipment. Before installing and using your unit, carefully examine the packaging and all contents for any signs of physical damage that may have occurred in transit.

(Note: Nady Systems is not responsible for shipping damage. If the unit is damaged, do not return to us, but notify your dealer and the shipping company immediately to make a claim. Such claims must be made by the consignee in a timely manner.)

CONTENTS:

- Instruction manual
- RDI-8 (verify that the unit's serial number is same as shown on shipping carton)
- AC Power cord
- Warranty Card

RACK MOUNTING

The RDI-8 fits into one standard 19" rack unit of space (1 3/4"). Parts of the unit can become very warm during use. This is normal during operation. Care should be taken to ensure that there is enough space around the unit for cooling (at least 12" or 30cm). Do not place the RDI-8 on high temperature devices such as power amplifiers, etc., or the unit may overheat in operation. Also, do not place the unit on speakers as this may cause them to move and/or fall due to speaker vibrations.

Although the unit's chassis is shielded against radio frequency (RF) and electromagnetic interference (EMI), extremely high fields of RF and EMI should be avoided.

POWER CONNECTION

The RDI-8 has an internal power supply and is designed to operate from an external AC source. Power requirements for electrical equipment differ from area to area. Be sure to confirm that the voltage selected by the voltage selector switch on the back panel is proper for your area (120VAC/60 Hz or 230VAC/50Hz) per the information below:

Europe (except UK): 230V, 50Hz UK and Australia: 240V, 50Hz USA and Canada: 120V, 60 Hz For other areas, please check with local authorities.

When ready to operate, plug the AC cord into the power source. Make sure that the unit is turned off before connecting to the AC power source to avoid possible loud transients which can damage your speakers or your ears, especially when monitoring with headphones.

FRONT & REAR CONNECTIONS





FRONT PANEL

(1) AUDIO INPUTS

Eight 1/4" unbalanced audio input jacks (one per channel) (2) PARALLEL LINK OUTPUTS

(2) PARALLEL LINK OUTPUTS

Eight 1/4" unbalanced line level jacks output connections for parallel channel line distribution

REAR PANEL

(8) AUDIO OUTPUTS

Eight XLR balanced output connectors (one per channel) (11) POWER CONNECTOR WITH FUSE HOLDER

This standard IEC power cord receptacle is used to connect the AC power to your unit. It features a built-in fuse holder for a 5X20mm, 0.5A/250V slow-blow fuse. If the fuse continuously blows, shut off the unit and have it serviced by qualified service personnel.

(13) STEREO MASTER OUTPUTS

This pair of Left/Right unbalanced RCA jack outputs provides a stereo output when the unit is used as a line mixer (*see APPLICATIONS, Using the RDI-8 as a line mixer*, *pg. 6*). The output level is controlled by the individual channel VOLUME CONTROLS (3) and the MASTER VOLUME CONTROL (7). The panning (L/R) is adjusted by the channel PAN CONTROLS (4). (14) STEREO LINE OUTPUTS

This pair of Left/Right unbalanced RCA jack outputs provides a second stereo output when the unit is used as a line mixer (*see APPLICATIONS, Using the RDI-8 as a line mixer*, *pg. 6*) The output level is controlled by the individual channel **VOLUME CONTROLS (3)**. The panning (L/R) is adjusted by the channel **PAN CONTROLS (4)**.

CONTROLS & INDICATORS

FRONT PANEL

The RDI-8 has 8 independent direct injection unbalanced to balanced line converters, in addition to a built-in 8-channel line mixer. The unit provides 2 rotary controls (Volume & Pan) and 2 switches per channel (Ground lift & 20dB PAD).

(3) VOLUME CONTROLS

Use these independent rotary controls to set the level of each channel signal level sent to the stereo **MASTER (13)** and **LINE (14)** outputs. They do not affect the signal level to the channel **OUPTUTS (8)**

(4) PAN CONTROLS

Use these independent rotary controls to set the PAN (Left and Right Imaging) of each channel signal sent to the stereo **MASTER (13)** and **LINE (14)** outputs.

(5) GROUND LIFT SWITCHES

Use these switches to lift the ground in the input signal of the channel being used (if needed to eliminate hum caused by that input). These affect all the **OUTPUTS (8,13,14)**

(6) 20dB PAD SWITCHES

Use these switches to PAD each input channel signal level by 20dB. Use this only if you have an extremely high input signal strength. These affect all the **OUTPUTS (8,13,14)**

(10) POWER LED INDICATOR

This LED indicator illuminates when the unit is powered on by the rear panel **POWER SWITCH (9)**.

REAR PANEL

(9) POWER SWITCH

To turn the unit ON or OFF, press the upper or lower portion of this button as indicated. The front panel **POWER LED**

INDICATOR (10) will illuminate when the power is "ON". Before turning on this unit, verify connection to the proper voltage AC source, check all connections and turn down the level controls of equipment connected to the outputs.

(12) AC VOLTAGE SELECTOR SWITCH

Before plugging in the power cord, check to see that the unit is set for the proper voltage for your area: \sim 115v (60Hz) or \sim 230V (50Hz).

(Note: use at the improper voltage can damage your unit and void the warranty.)

(15) GROUND

Connect short wire to rack or other equipment to ground this unit for safety.

APPLICATIONS

USING THE RDI-8 AS A DI BOX (DIRECT INJECTION UNIT)

Connect the signal you would like to convert from unbalanced to balanced to the RDI-8 via a 1/4" unbalanced plug to one of the channel **LINE INPUTS (1)** on the front panel of the unit. Connect an XLR balanced cable to the corresponding channel **OUTPUT (8)** on the rear of the RDI-8 and connect to your chosen destination. If the input signal strength is too "hot" (high) you can depress the **20dB PAD (6)** switch to adjust to a more appropriate level. If there is a ground loop hum you can remove it by depressing the **GROUND LIFT (5)** switch.

USING THE RDI-8 AS A LINE MIXER

You can mix volume & pan of all input signals simultaneously to both stereo pairs of RCA connections on the rear of the RDI-8: the **MASTER (13)** and **LINE (14)** outputs. This enables use of the unit as a fully functional line mixer. This can be very handy for many applications, both live and in the studio. Just connect either or both the stereo **MASTER (13)** or **LINE (14)** outputs on the rear to your chosen destination(s), such as a monitor amplifier, and adjust the individual **VOLUME (3)** and **PAN (4)** controls for each individual channel on the front of the RDI-8 to suit your needs. A **MASTER VOLUME (7)** control is provided on the front panel, in addition to the individual controls, and adjusts only the **MASTER (13)** output. Adjust as necessary.

USING THE RDI-8 PARALLEL CHANNEL LINE OUTPUT

A unbalanced parallel LINK OUTPUT (2) is provided on the front panel next to each LINE INPUT (1) jack. This is useful for routing a direct link out, in addition to the balanced XLR OUTPUT (8) on the rear panel (for example, if you would like to monitor a specific input locally while sending a XLR balanced direct output to another source without affecting the line mixer signal).

SPECIFICATIONS

AUDIO INPUTS

Connectors	1/4" jack
Туре	TRS balanced
Impedance	47k Ohms
Min Sensitivity	20dB
Peak input level	+16dB

PARALLEL LINK OUTPUTS

Connectors	1/4" jack
Туре	Unbalanced/parallel

STEREO LINE MIXER OUTPUTS

Connectors	RCA Phono
Impedance	600 Ohms
Max. output level	+2dB (peak level +18.5 dB)

XLR BALANCED OUTPUTS

Connectors	XLR Type balanced
Min. output impedance	600 Ohms
Max. output level	0dB (peak level +18.5dB)

DISTORTION, FREQUENCY RESPONSE, S/N RATIO & CROSSTALK

Frequency response	20Hz~20kHz, 0dB~-2B
Distortion	0.02%
S/N Ratio	Better than 95dB
Crosstalk rejection>8	30dB@1kHz;-20dB input

FUNCTION CONTROLS

Volume	Per channel variable
Volume	Per channel variable

POWER SUPPLY

Power requirement	Selectable, ~ 100-120 VAC,
	~ 200-240 VAC, 50-60 Hz
Power consumption	11.5VA
Fuse	100-120 VAC: 630 mA (slow-blow)
	200-240 VAC: 315 mA (slow-blow)
	100-240 VAC: 500 mA (slow-blow)
	5X20mm glass type
Power cord connector	Standard IEC receptacle
	with built-in fuse holder

PHYSICAL

Dimensions	1.75"X 19"X 8.5" (44.5X482.6X21	17mm)
Weight		.25Kg)

The specifications above are correct at the time of printing of this manual. For improvement purposes, all specifications for this unit, including design and appearance, are subject to change without prior notice.

NOTES

SERVICE FOR YOUR NADY AUDIO PRODUCT

(U.S.) Should your NADY AUDIO product require service, please contact the Nady Service Department via telephone at (510) 652-2411, or e-mail at service@nady.com.

(International) For service, please contact the NADY AUDIO distributor in your country through the dealer from whom you purchased this product.

DO NOT ATTEMPT TO SERVICE THIS UNIT YOURSELF AS IT CAN BE DANGEROUS AND WILL ALSO VOID THE WARRANTY.



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